BERKELEY LAB

ATAP
ACCELERATOR TECHNOLOGY & APPLIED PHYSICS DIVISION

ACCELERATOR TECHNOLOGY & APPLIED PHYSICS FY15 ES&H FOCUS AREA SELF-ASSESSMENT REPORT

WORK PLANNING AND CONTROL

December 2014 – October 2015

Signatures:

Approval:

Dan Dietderich, Team Leader — Oct. 22, 2015 (date signed)

Patricia Thomas, Safety Coordinator — 10/22/15 (date signed)

Wim Leemans, Division Director — 10/23/15 (date signed)

TABLE OF CONTENTS

1.0 Executive Summary

This assessment focused on Work Planning and Control (WPC) program initial implementation at ATAP. This Focus Area was recommended by the ATAP ES&H Operations Committee and approved by the Division Director (Wim Leemans) because of potential impact on safety culture and the safety of personnel. This assessment is most closely associated with the 1st Core Function of ISM, planning work.

LBNL has been developing a new work planning and control system to describe work, identify hazards, identify controls appropriate to those hazards, and authorize workers. This system (WPC Activity Manager) was initially launched in November of 2014.

WPC Activity Manager is LBNL's corrective action to a finding from the 2009 Independent Oversight Inspection conducted by DOE. The finding states:

> "*The LBNL job hazard analysis process design and implementation does not sufficiently ensure that all hazards at the activity level are systematically identified, analyzed, and controlled, as needed to ensure compliance with 10 CFR851, Worker Safety and Health Program, DOE Policy 450.4, Safety Management System Policy, and the LBNL Health and Safety Manual.*"

This self-assessment focused on the experiences of ATAP personnel during the initial implementation of WPC Activity Manager. The emphasis was on safety culture change and opportunities for improvement of the WPC system (ISM Core Function 5) rather than compliance, because the requirements were still evolving and being phased in during the assessment period.

ATAP Program Heads selected representatives to serve on the assessment team: Hiroshi Nishimura (Advanced Light Source Accelerator Physics), Csaba Toth (BELLA Center), John Byrd (Center for Beam Physics), Thomas Schenkel (Fusion Science and Ion Beam Technology) and Dan Dietderich (Team Leader -- Superconducting Magnets). Scott Taylor was selected to provide advice because he was involved in developing the WPC system. Pat Thomas (ATAP ESH Coordinator), Tammy Welcome (Office of Contractor Assurance), and Andrew Peterson (EHS) provided guidance on the self-assessment process.

The ATAP assessment took place from December 2014 to October 2015. The assessment methodology was to conduct interviews with personnel in various roles (Project Lead, Activity Lead, Supervisor, Worker) in each Program, using an Interview Questionnaire (see Supporting Documentation.

A **Noteworthy Practice** is a practice of condition that is recognized for its excellence and should be considered for Lab-wide application. There were no Noteworthy Practices noted during this assessment.

A **Finding** is a program or performance deficiency where the deficiency is a noncompliance with an established external or internal requirement. Because requirements were in the process of being developed and phased-in during this assessment, the assessment focused on recommendations for improving systems rather than compliance with requirements.

An **Observation** is a practice or condition that is not technically noncompliant with an external or internal regulation or requirement, but could lead to noncompliance if left unaddressed. There were 13 Observations:

Observation	Recommended Action
1. Some workers find WPC difficult to use.	1. Have more group training with the WPC system.
2. For complex activities, many controls are listed and it can be confusing.	2. It would be useful to color-code the hazards and controls to match.
3. People using WPC cannot generate emails in WPC to immediately address issues.	3. It would be useful to be able to generate email directly through the WPC system.
4. Email notifications from WPC do not state the action required.	4. Describe the action required in the email notifications from WPC.
5. Users were confused by the new terminology used in the WPC system.	5. Generate a glossary of terms and definitions.
6. It is not easy to determine the status of Activities in Development.	6. Develop a method for tracking and displaying the status of Activities in Development to clearly indicate who needs to take action.
7. When new Versions of Activities are released for review and acceptance by workers, it is difficult for the workers to identify what has changed.	7. Set up a "track changes" feature in Activities so that changes can be seen quickly when workers need to review and accept new Versions.
8. The system is impersonal. Just clicking buttons (i.e. assignments and acceptances) is too easy and can become routine without thinking through all the implications.	8. Communicate the importance of continued Line Management Supervisor responsibility for oversight of their workers' safety. 8b. Communicate the importance of Line Management Supervisor and Activity Lead direct interaction and communication with workers about safety.
9. Many commented about missing the questionnaire in the JHA system, because it stimulated discussions between supervisors and workers. Some commented that it is difficult for Activity Leads to identify all the applicable hazards without the questionnaire.	9. Develop a JHA-like questionnaire tool to be used in conjunction with WPC, to facilitate Supervisor/Worker communication and to help Activity Leads identify the correct hazards.
10. The interaction between Activities and Radiological Work Authorizations was not clear.	10. Provide written guidance to Principle Investigators for Radiological Work Authorizations on requirements for development of corresponding Activities.
11. It was not clear how On-the-Job Training should be documented.	11. Develop recommendations and tools for documentation of On-the-Job Training.
12. Interaction between WPC and the Berkeley Lab Training (BLT) database is cumbersome.	12a. Provide an automatic e-mail notification to the Activity Lead and Supervisor when a worker's required training has expired. 12b. Integrate links to BLT into WPC.
13. When Activities reference other documents (procedures, work authorizations, etc.), workers do not always know where to find the documents.	13. When the Description of Work or Controls in an Activity reference another document, an URL or document location should be included.

2.0 Introduction

The topic of this ATAP FY15 Focus Area Self-Assessment is Work Planning and Control. LBNL has been developing a new work planning and control system to describe work, identify hazards, identify controls appropriate to those hazards, and authorize workers. WPC Activity Manager is LBNL's corrective action to a finding from the 2009 Independent Oversight Inspection conducted by DOE. The finding states:

> *"The LBNL job hazard analysis process design and implementation does not sufficiently ensure that all hazards at the activity level are systematically identified, analyzed, and controlled, as needed to ensure compliance with 10 CFR851, Worker Safety and Health Program, DOE Policy 450.4, Safety Management System Policy, and the LBNL Health and Safety Manual."*

Work Planning and Control Development and Implementation Timeline

Date	LBNL	ATAP	Self-Assessment
2009	DOE inspection finding identified need for WPC		
2010 -2011	User Group formed; benchmarking studies; description of program; recommendations		
2012 - 2013	System development working group; software development	DSC participates in working group	
January - March 2014	Beta Test	BELLA and NDCX-II participate in BETA test	
April 2014	Soft Launch planning		
July 2014	Soft Launch begins	BELLA and NDCX-II participate in Soft Launch	
August 2014		Planning meetings with Programs	
September 2014	Soft Launch ends		
October 2014	Division Plan development, user training, teleconferences begin	Initial implementation plan developed	
November 2014	System Launch	BELLA meetings; WPC incorporated in ISM Plan	
December 2014		Activity development; coordination with ALS	Dec. 8 Self-Assessment team training

Date	LBNL	ATAP	Self-Assessment
January 2015		Activities development for: Supercon, NDCX-II BELLA IBT	
February 2015	WPC Goals established; discussion of Division self-assessments	Activities development; Safety Day WPC workshop; ISM Plan updated	
March 2015		Activities development workshop	
April 2015	AHDs expiring by April 30 to be transitioned	Development of Activities for AHDs expiring by April 30	April 14 Team meeting: Discuss scope, Lines of Inquiry, methodology
May 2015	No new AHDs	ATAP Supervisors workshop	May 22 Team meeting: Finish developing interview questionnaire; decide who to interview; make assignments; schedule interviews.
June 2015		Staff transition planning for Supervisors of ≥ 5 people	June 23 Team meeting: check progress of interviews and discuss preliminary conclusions
July 2015	Development of Policy and EHS Manual requirements; No new JHAs	Staff transition planning	July 10 Team meeting: discuss interview results and draft conclusions
August 2015	Benchmarking with other Labs	Activities development workshop	August 13 Team meeting: interview reports from ALS and Supercon; start writing assessment report results from LBNL benchmarking visit
September/October 2015	90% of AHDs to be transitioned to WPC	Last ATAP AHD closed; begin closing JHA work groups	Report development

3.0 Current Requirements

Integrated Safety Management

LBNL PUB-3140, Integrated Environment, Safety, and Health Management Plan describes the Core Functions and Guiding Principles of ISM and describes the overall system for implementing ISM at LBNL. While the WPC system is most closely associated with Core Function 2, Plan Work, it contains features to guide line management and workers in implementing the entire ISM process:

WPC Implementation of ISM Core Functions:

1. **Define the scope of work** – When developing a new Activity in Activity Manager, the first two tabs in the system "Description" and "Define Work", require the Activity Lead to describe in detail the work to be authorized and performed, including equipment and materials used, and limitations.
2. **Analyze the hazards and environmental impacts** – EHS Subject Matter Experts have developed menus of typical LBNL hazards that Activity Leads view under the "Select Hazards" tab and decide which hazards are applicable to the scope of work they have defined.
3. **Develop and implement hazard and environmental controls** – EHS Subject Matter Experts have defined the required and recommended controls for each hazard selected. Under the "Review Controls" tab, the Activity Lead selects which recommended controls are applicable, further defines controls, and may specify additional controls.
4. **Perform work within controls** – The WPC system establishes roles and responsibilities for everyone involved in the process, including Division Directors, Safety Coordinators, Supervisors, Program Leads, Activity Leads, workers, and EHS Liaisons and Subject Matter Experts. The Activity Lead assigns workers, checks their training completions, and establishes authorization levels for workers. Supervisors must approve worker's assignments to high-hazard Activities. The worker must review and accept the conditions of their assignment. The Activity consolidates the information a worker needs to work safely in one location.
5. **Provide feedback and continuous improvement** – The WPC system provides opportunities for collaboration within the Division and with EHS during the Activity development process. There is a required 1 – 3 year review cycle, based on hazard level, but Activities can be updated at any time. The WPC system contains a link that allows users to suggest improvements to the system.

LBNL Policy

The LBNL Requirements and Policies Manual, Environment, Health and Safety, Hazards Analysis and Work Authorization Programs includes a Hazards Analysis and Work Authorization Policy and Overview and a section on Work Planning and Control. The current version of the Policy was published in August 2015.

Berkeley Lab's Hazard Analysis & Work Authorization Policy ensures that all work is performed in a safe manner by:

- Ensuring that work planning is performed prior to starting work

- Defining the work scope, analyzing associated hazards, and developing controls such that hazards are identified and mitigated
- Providing work authorization processes to ensure that procedures, controls, and resources are in place. These processes may include:
    - Work Planning and Control (WPC) activities in Activity Manager for work done by workers and affiliates
    - Subcontractor Job Hazards Analysis (sJHA)
    - Construction subcontractors' ES&H submittal package (Construction JHA)
    - Temporary Work Authorization (TWA)
    - Radiological Work Authorization (RWA)
    - Facility Work Authorization
- Ensuring that the process and authorizations are documented prior to starting work

The Work Planning and Control requires that at Lawrence Berkeley National Laboratory (Berkeley Lab), all work must be authorized before it is performed. Work authorization has two distinct components. The work itself must be planned, reviewed, and authorized before it may proceed. Individual workers must then be properly trained and authorized before they can proceed with their assigned work activities. This dual-step authorization process helps ensure work is performed safely by authorized staff.

Berkeley Lab uses Activity Manager, the database supporting the Work Planning and Control (WPC) program, to:

- Define the scope of work that will be performed
- Identify the hazards associated with this work
- Identify the controls necessary for the hazards
- Authorize work
- Assign and authorize workers to perform work activities

Work may not proceed until authorized by management, and workers may not perform work until they are assigned to one or more work activities and have been authorized by line management. This includes unpredictable, short-term, or unusual work, all of which must be reviewed and authorized.

Work is authorized following a risk-based approach. Work involving low or moderate hazards is authorized by line management. Work involving higher hazards requires concurrence of the Environment/Health/Safety (EHS) Division in addition to line management authorization and supervisor approval.

Workers are authorized at a level commensurate with their knowledge and skill level given the particular hazards associated with work. This is a decision made by line management.

Work is reviewed and the authorization renewed periodically based on the hazards associated with the work or when the work, hazards, or controls change significantly. Worker authorization must be renewed on the same schedule.

Equivalent work authorization systems are allowed, but these must be approved by the EHS Division Director.

EH&S Requirements

The detailed requirements for Work Planning and Control are contained in ES&H Manual Chapter 6, Work Planning and Control at http://www2.lbl.gov/ehs/pub3000/CH06.html#_Toc335085835

Section 6.5 Work Planning and Control Process Overview includes the process diagram on the following page.

Section 6.6 defines the Roles and Responsibilities.

ATAP Requirements

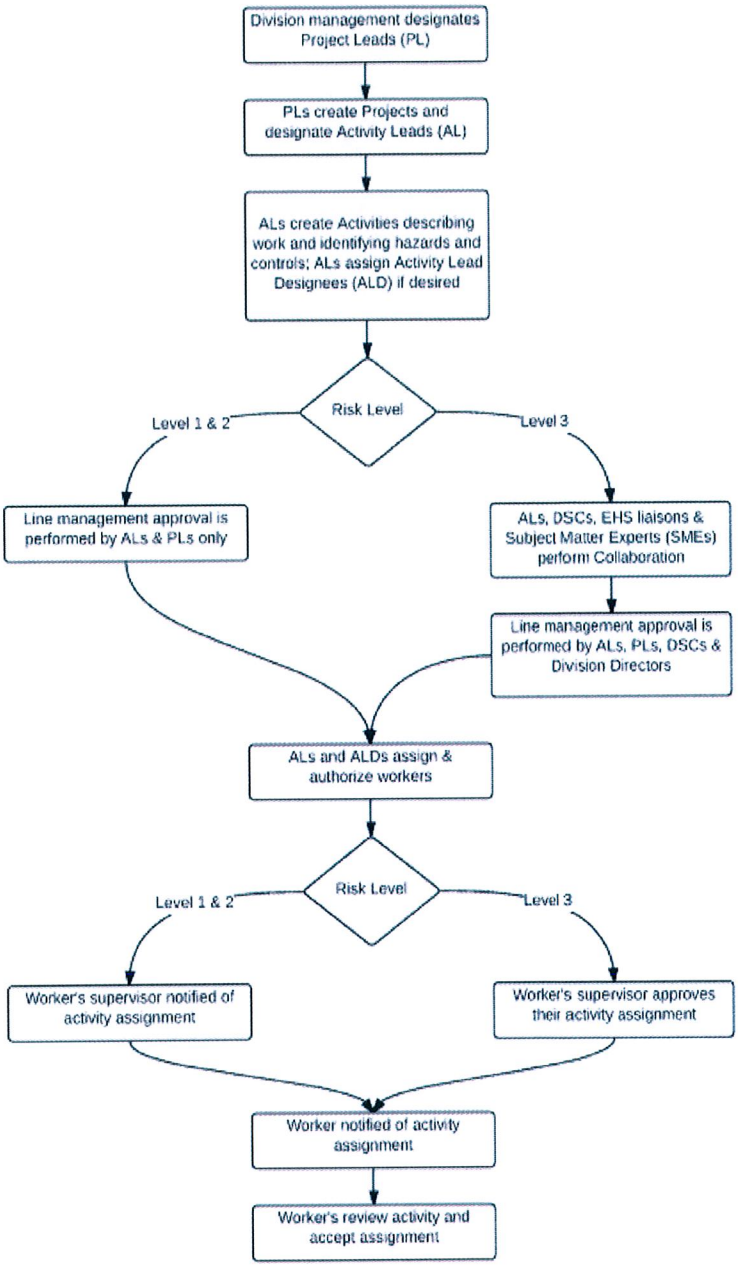
ATAP ISM Plan is posted on the ATAP Safety website: http://atap.lbl.gov/ism-plan/

Section 3 Work, Hazards and Controls contains guidance for Division transition to WPC, including:

- Section 3.1 Integrated Work Planning,
- Section 3.2 Transition to WPC
- Section 3.3 WPC Process
- Section 3.4 Other Safety Evaluations and Work Authorizations
- Section 3.5 Subcontractor and Vendor Oversight
- Section 3.7 Activity Review Form

Section 3 was revised in November 2014 to incorporate WPC and updated in February 2015.

Work Planning and Control Process Diagram



4.0 Assessment Scope and Methodology

Assessment Team

ATAP Program Heads selected representatives to serve on the assessment team:

- Hiroshi Nishimura (Advanced Light Source Accelerator Physics);
- Csaba Toth (BELLA Center);
- John Byrd (Center for Beam Physics);
- Thomas Schenkel (Fusion Science and Ion Beam Technology); and
- Dan Dietderich (Team Leader -- Superconducting Magnets).

Scott Taylor was selected to provide advice because he was involved in developing the WPC system. Pat Thomas (ATAP ESH Coordinator), Tammy Welcome (Office of Contractor Assurance), and Andrew Peterson (EHS) provided guidance on the self-assessment process.

Scope

This self-assessment focused on the experiences of ATAP personnel during the initial implementation of WPC Activity Manager within ATAP including:

- Locations where ATAP work takes place;
- ATAP employees, affiliates and matrixed personnel; and
- Process of establishing Work Planning and Control Projects and Activities.

The scope of the self-assessment covers the authorization of work under the new work planning and control system (WPC Activity Manager). The self-assessment excluded assessment of execution to the requirements within the Activities and assessment of the adequacy of the pre-established hazards and the pre-established hazards and their associated controls in WPC Activity Manager. The emphasis was on safety culture change and opportunities for improvement of the WPC system rather than compliance with requirements, because the requirements were still evolving and being phased in during the assessment period.

Lines of Inquiry

The assessment was designed to answer the following questions:

1. Is the Activity Manager system useful?
2. Is the Activity Manager system easy to use?
3. Is the information in Activities (scope of work, authorizations, hazards and controls) clear?
4. Are roles and responsibilities for implementing WPC clearly understood?

Methodology

The team members conducted interviews of personnel in each ATAP Program, in various roles. The goal was to interview:

- at least one Project Lead;
- at least two Activity Leads;
- at least two Supervisors (one matrixed, where applicable); and
- at least three workers

in each Program. The interviews could be conducted individually, or as a discussion at a Program safety meeting. The results of the interviews were discussed with the Assessment Team.

A questionnaire was developed to guide the interviews (see Supporting Documents). All interviewees were asked the "worker" questions, and additional questions were asked for people with special roles (Project Lead, Activity Lead, or Supervisor).

5.0 Interview Results

Answers to Lines of Inquiry

1. Is the Activity Manager system useful?

Workers responses:
- *Mostly used only at the beginning, not really used since then;*
- *Not clear how to use;*
- *The controls for the work are not ranked by priority;*
- *The JHA is easier since it is a single document covering all activities. The JHA usually covers hazards over several years, regardless of the specific project;*
- *Those who have only been assigned to the AL-0087 Activity were not familiar with WPC at all; however, after learning how to use Activity Manager, they found it quite adequate;*
- *After a learning period, workers are becoming more familiar with the process, still JHA was more intuitive since it covered all training and activities for each person vs. having those spread over a series of activities.*

Activity Lead responses:
- *Importance of On-the-Job Training needs to be communicated;*
- *Setting up special conditions is still cumbersome;*
- *Not easy to find the liaison at EHS;*
-- *The system creates the need for additional e-mails and phone calls, but the communications cannot be generated inside Activity Manager itself;*
- *Not approaching safety differently since the system was released. Sometimes it is even more distanced from actual workers;*
- *Matrixed personnel are managed by building separate, local Activities; the system is capable to capture the specialties, if used correctly;*
- *Handling matrixed employees is easier in this new system;*
- *Our activities include matrixed workers, students, and visitors. This is far more inclusive than before.*
- *Some of the Activities for ALS Accelerator Physics are not ready yet.*
- *It is not easy to figure out the status of Activities in development, to know "who is holding, or waiting for, what".*
- *It is often not clear what roles and responsibilities are, who is supposed to do what action, it would be nice if the emails clearly stated that an action was required, vs. just a notification.*

2. Is the Activity Manager system easy to use?

Workers responses:
- Good, easy to find detailed information;
- Generally workable, looks intuitive;
- For large, complex Activities, when there is too much included into one Activity, it is hard to follow;
- There should be a functionality in Activity Manager to 'email collaborators. "As is, when I went to request approval from people, I had to look up each person's name in the lab directory and copy/paste them into an email";
-The daily email which says "you have X alerts in activity manager" is nearly useless. It should at minimum list what the items are in each category;
- Editing the gdoc portion is needlessly constrained to part-screen. This is bad enough on any monitor and really painful on smaller ones. Easy fix - allow the document to be popped out or opened into normal Google docs;
-The system was much easier once we had group training;
-It would be good to have WPC instructions specifically for office workers (ergo, etc.) and for occasional visitors (i.e. retirees);
- Only after they learned how to access AM in person, they found that it is easy to follow;
- The email messages from Activity Manager were confusing and not taken seriously;
-The URL links should be added to the reference;.
-The tutorial video is very useful. However, its availability is not very stable. It often fails to show up;.
- There are too many jargons (unfamiliar terms). It would be nice to have an introductory of page to introduce special terms.
-Yes, the use of jargon should be discouraged and replaced with common sense language.

Activity Lead responses:
- Many commented the missing personal questionnaire we used in the JHA system. There is a fear, that some hazard might be missed. The system seems un-personal, just clicking buttons (i.e. assignments and signatures/acceptances are too easy, becomes routine;
- Functionality OK, descriptions of hazards are good;
- Layout is good.
- It was in development when one person was first interviewed but it got better.
- Like the Activity Manager interface but it is time consuming. May have to create two Activities for

-Much easier to include new employees on specific tasks rather than covering them for everything
-AL-0087 looks fine in description.
-Generally speaking, it is better to have a table of "who has what Activities" (Activities available and Activity Leads).

3. Is the information in Activities (scope of work, authorizations, hazards and controls) clear?

Workers responses:
- *Scope communicated by the Activity Leads, generally positive feedback, scopes are written well;*
- *Level of authorizations generally OK and clear for all interviewees; written well;*
- *Better description of connection and correspondence between Hazards and Controls, i.e. which refers to which?*
- *If the Activity is too complex, too many controls listed, it can be confusing;*
- *Very well suited for small group activities since everyone is already familiar with the work;*
- *Easy to add new students/visitors to work and assign training;*
- *It would be good to have WPC instructions specifically for office workers (ergo, etc.) and for occasional visitors (i.e. retirees)*
- *Found adequate at ALS.*

Activity Lead responses:
- *It is generally clear which hazards apply to the work;*
- *How to deal with an RWA was initially not clear, but this may now be resolved;*
- *How OJT should be documented was not clear;*
- *A Scanning Electron Microscope is listed as having an electrical hazard but its operational manual suffice along with OJT as controls;*
- *In Activity Manager, a person can review a workers training, once one understands the path to the worker;*
- *It would be useful to color the hazards and controls to match;*
- *Track changes or highlight changes in Activity when it is changed so that when workers review it the modifications are clear;*
- *Too task oriented. It would be better if by roles, i.e. JHAs;*
- *It would be nice if expired classes or training is highlighted.*

4. Are roles and responsibilities for implementing WPC clearly understood?

Workers responses:
- *Person or persons with safety oversight generally clear for all interviewees: Work (Activity) Leads;*
- *It becomes clear following training and discussion*

Activity Lead responses:
- *Generally : yes*
- *Up until now it is clear but we haven't had a situation that really tests the system yet since most activities were continuations of activities covered under AHD.*

Project Lead responses:
- *Missing central view for all users; hard to approve individual users, need batch processing;*

- Follow through is missing: what if someone is not in compliance? No automatic e-mail notification to Project lead and Supervisor, if someone's training is expired.
- Cannot view the Activities for the whole group
- It would be useful to have a list of all people from all Activities covered by me and their training status. In this sense the JHA was superior. However, I would like to ensure that matrixed workers are also covered without having to look at each Activity.

Supervisor responses:
- Connection to training database is cumbersome. Not clear who has or has not the required training without going through multiple Activities;
-Training links are too far down in the system or nonexistent, need separate login to training.

6.0 Observations and Recommendations

An **Observation** is a practice or condition that is not technically noncompliant with an external or internal regulation or requirement, but could lead to noncompliance if left unaddressed. There were 13 Observations.

Observation	Recommended Action
1. Some workers find WPC difficult to use.	1. Have more group training with the WPC system.
2. For complex activities, many controls are listed and it can be confusing.	2. It would be useful to color-code the hazards and controls to match.
3. People using WPC cannot generate emails in WPC to immediately address issues.	3. It would be useful to be able to generate email directly through the WPC system.
4. Email notifications from WPC do not state the action required.	4. Describe the action required in the email notifications from WPC.
5. Users were confused by the new terminology used in the WPC system.	5. Generate a glossary of terms and definitions.
6. It is not easy to determine the status of Activities in Development.	6. Develop a method for tracking and displaying the status of Activities in Development to clearly indicate who needs to take action.
7. When new Versions of Activities are released for review and acceptance by workers, it is difficult for the workers to identify what has changed.	7. Set up a "track changes" feature in Activities so that changes can be seen quickly when workers need to review and accept new Versions.
8. The system is impersonal. Just clicking buttons (i.e. assignments and acceptances) is too easy and can become routine without thinking through all the implications.	8. Communicate the importance of continued Line Management Supervisor responsibility for oversight of their workers' safety. 8b. Communicate the importance of Line Management Supervisor and Activity Lead direct interaction and communication with workers about safety.
9. Many commented about missing the questionnaire in the JHA system, because it stimulated discussions between supervisors and workers. Some commented that it is difficult for Activity Leads to identify all the applicable hazards without the questionnaire.	9. Develop a JHA-like questionnaire tool to be used in conjunction with WPC, to facilitate Supervisor/Worker communication and to help Activity Leads identify the correct hazards.
10. The interaction between Activities and Radiological Work Authorizations was not clear.	10. Provide written guidance to Principle Investigators for Radiological Work Authorizations on requirements for development of corresponding Activities.
11. It was not clear how On-the-Job Training should be documented.	11. Develop recommendations and tools for documentation of On-the-Job Training.
12. Interaction between WPC and the Berkeley Lab Training (BLT) database is cumbersome.	12a. Provide an automatic e-mail notification to the Activity Lead and Supervisor when a worker's required training has expired. 12b. Integrate links to BLT into WPC.
13. When Activities reference other documents (procedures, work authorizations, etc.), workers do not always know where to find the documents.	13. When the Description of Work or Controls in an Activity reference another document, an URL or document location should be included.

7.0 Supporting Documents – Interview Questionnaire

	What we want / what we want to know	Lines of inquiry
Workers	AM is intuitive and easy to use	• Describe the use of AM. • How was the navigation experience? • Could you find what you need? • Was there information you wanted but could not find?
	AM is a useful system	• How frequently do you use AM? • Is the information in AM useful to you?
	The scopes of work authorizations are clear	• How was the work scope communicated to you? • What are you authorized to do under activity X? • What are the boundaries of the work? In other words, what are you not authorized to do?
	The level of authorization is clear	• What is your authorization status for activity X?
	Hazards and controls associated with the work are clear	• Describe how the presentation of the scope of work, hazards and controls facilitates your understanding of the link between the hazards of the work and the control for the hazards. • Are the controls for the work clear and unambiguous? • What other information could be included in AM that would enhance your understanding of the hazards and controls associated with the work activity?
	Person or persons with safety oversight is clear	• For activity x, who is responsible for safety oversight?
Activity Lead	Activities are easy to create and work is easy to authorize in AM	• Describe the experience of using AM. • Does it have the functionality that you need to describe and authorize work?
	Hazards and controls clear, unambiguous, thorough and accurate	• Describe the hazard selection process? • When reviewing hazards, is it usually clear which hazards apply to the work?
	ALs understand their roles and responsibilities within WPC	• As AL, what responsibilities do you have for the safety of the work activities you have created?
	AM helps manage safety	• How are you using AM? For what purposes? • Are controls more clearly communicated through AM than through previous systems? • Are you using AM to help monitor worker's training status? • Describe the worker assignment and acceptance process. Is AM helping to foster a conversation about hazards and controls? Are you reviewing activities before you ask workers to review and accept conditions?

	AM helps foster line management accountability for safety at the Lab	• Are you approaching safety differently now that AM has been released?
	AM is robust and flexible enough to cover the volume and variety of work that occurs at the Lab	• Does the system have the functionality you need to help manage safety? • What are the strengths and weaknesses of the system?
	AM adequately manages the complexity of matrixed workers	• How do you manage matrixed workers in AM?
Project Lead	PLs understand their roles and responsibilities within WPC	• As PL, what responsibilities do you have for the safety of activities under your projects?
Supervisor	Supervisors understand their roles and responsibilities within WPC	• As Supervisor, what responsibilities do you have in AM? • What responsibilities do you have for safety of the work performed by your employees?
	Supervisors have adequate visibility to their direct report's work activities	• How can you verify your direct reports have been added to activities, have completed necessary training and accepted work conditions?